

ESSENCE OF ARCHITECTURAL APPROACH IN SHAPING THE BUILT ENVIRONMENT

Ina Lambeva, Irena Spiridonova

High school of Civil Engineering “Luben Karavelov”, Faculty of Architecture, 175 Suhodolska Street,
1373, Sofia, Bulgaria

Abstract

The built environment is a man-made surrounding that provides space for all kinds of human activities. Our quality of life is deeply influenced by the surrounding urban environment that we inhabit. That is why it is crucially important for us as designers and architects to execute extensive research over different architectural practices in developing the ultimate space for living. This is the focus of the paper to study different designer's methods in solving architectural and urban planning tasks. We will try to list and analyze some of the architectural approaches used in contemporary urban design and architecture that provoke the creativity of the designer and architect to create better, more interesting and functional urban space to experience.

Key words: architectural approach, conceptual, cognitive, organic

1. WHAT IS ARCHITECTURAL APPROACH

In the past buildings evolved from the basic human need for shelter, security, worship, trade etc. They developed based on the familiar abilities of the available materials and technologies. At the very beginning the human built environment was created based only on functional needs. Throughout centuries the available materials, space and skills gave rise to wide range of building techniques which caused the improvement and personalization of these early structures. Buildings became more than just functional shelter. Building design became more than a simple problem-solving task. Today with the vast and diverse possibilities of materials and techniques the building design process is difficult to be defined and reviewed. It is a challenging task to describe what that process actually is. There are numerous techniques and methods explaining the complexity of the design process however the creative process itself remains elusive.

THE FIVE PHASES

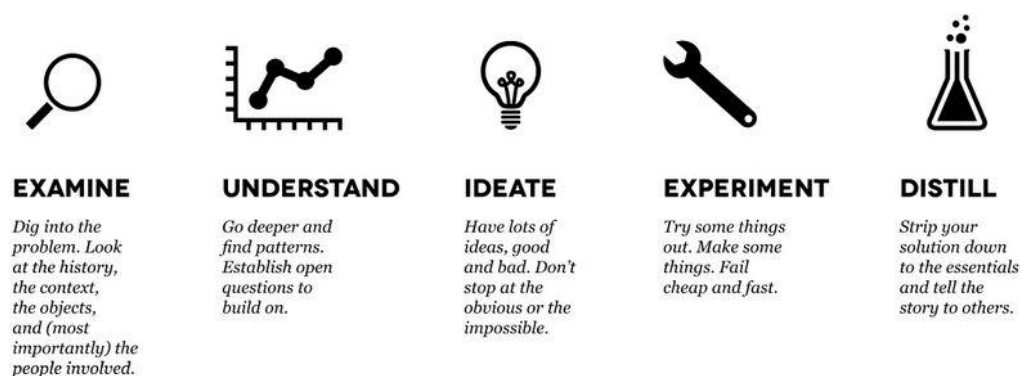


Fig. 1. The five phases of the design process

- How does the design itself emerge?
- What are the inspirations?
- What are the thought processes that move the design from a blank piece of paper or an empty computer screen to a completed design?
- To what extent is the process creative?

In the past the dynamic of the design process was diminished and it was tended to be more stable practice that evolved slowly. Each new building was slightly modified than the previous one and it was considered that the design process was one without methodology, but an intuitive process. Nowadays the rapid exchange of information, the immense raise in development of technology and the unlimited use of materials caused building types to evolve faster. The building design process became more complex and pluralistic, combination of practicality and aesthetic, of art and science. The need for building clear architectural concept became inevitable. In order to achieve better, more interesting and functional urban space to experience an architectural approach for solving architectural and urban planning tasks is essential.

Approach means a way of dealing with a situation or a problem and taking preliminary steps toward accomplishment or full knowledge of experience. The architectural approach in solving a planning task can clearly be defined as preliminary research, gathering data and establishing the best way to deal with the stated design task. There are plenty of methods to determine that way:

- Conceptual approach
- Cognitive approach
- Intuitive or idea-based approach
- Organic approach
- Sustainable approach
- Holistic / surrealistic approach
- Style based approach
- Form based approach
- Function based approach

Each one of the listed methods above is capable to fulfill an architectural task. Certainly there is not a correct way to design a building however valuable architecture can efficiently be achieved with the use of architectural approach that most imply to our nature, understanding and believes as creative individuals.

2. THE NEED OF ARCHITECTURAL APPROACH

As architects we should always strive to create spaces and buildings that have both cultural and creative value also to accomplish the complexity of the function and form required by the need of the events and activities that happen inside and outside the structure. By choosing the right approach for us we get closer to the creative process and finding our own style rather than copy and post-rationalize. Of course there is difference when your concept is purposely created at the conclusion and when you clear your concept at the conclusion. This is a process when after the completion of the design the concept is not created but made clear or understood by the architect. The concept may be in the architect's head from the beginning but he or she may be struggling to develop it into something they can consciously understand. And here the clear and conscious choice of architectural approach makes it easier to realize your concept. Someone said that "Imagination - which is a specific way in which our brains are collecting, categorizing, re-ordering, and generating new ideas in the pursuit of solving some problem or obtaining some goal." A good architect is able to catalog, collect and categorize, re-order and generate new ideas. A good architect is being true to his/her design intuition. If not than this is manifestation of insecurity and we cannot let everyone define what the trends are so we can be En Vogue. To be creator of trends but not copy or borrow someone else ideas is achieved through the right architectural approach.

Before any of the big architects became famous with certain signature in their work, their complex ideas about architecture were first brought out through art and drawings which later formed their style in architecture. It didn't always work out despite the public embrace but still they managed to communicate the trends of their architectural theories.

“As soon as I understand the scale of the building and the relationship to the site and the relationship to the client, as it becomes more and more clear to me, I start doing sketches” - Frank O. Gehry

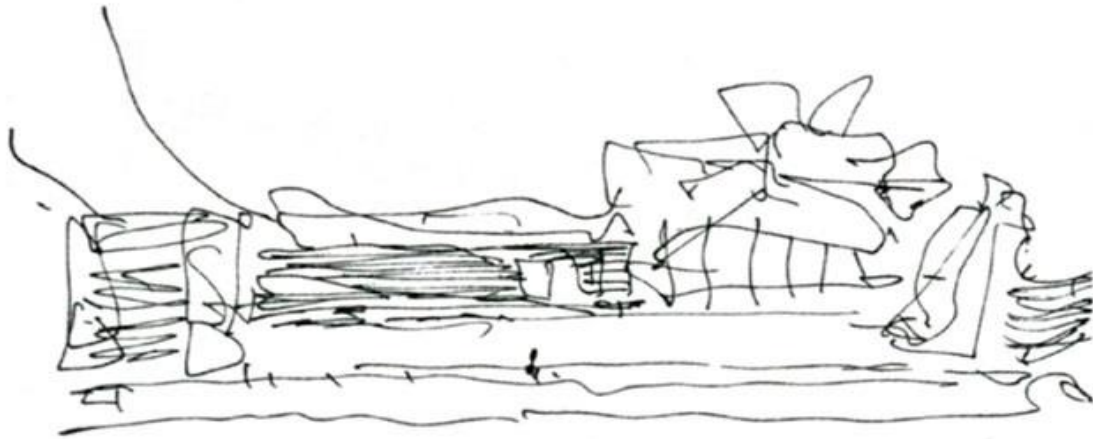


Fig. 2. Frank O Ghery's drawing for the Guggenheim's Bilbao museum

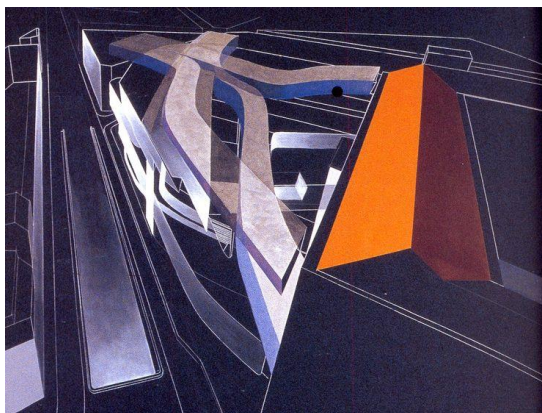


Fig. 3. Zaha Hadid Diagram Painting

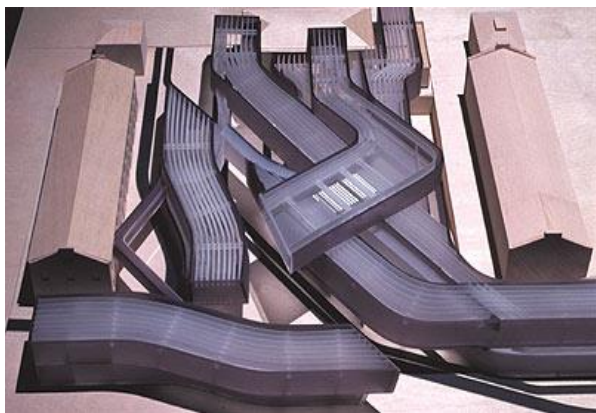


Fig. 4. MAXI national museum art and architecture Scale model

It is absolutely clear that each one of the successful architects has found the approach in achieving the desired form and structure. Of course it is not the only possible way sometimes certain amount of ignorance about your own intentions is probably a good thing however if you are aiming in persistency in your work clear and conscious approach is not only helpful and useful but required. The appropriate approach sets the boundary for the design concept to evolve into an idea without at the end wanting to be something else.

3. DIVERSITY IN ARCHITECTURAL APPROACH

3.1. Conceptual architectural approach

“It doesn’t work, it doesn’t have to work. Wright had the shape conceived long before he knew what was going into it. I claim that is where architecture starts, with the concept”¹

Conceptual approach is focused not at the final execution of the structure but mostly on the process and the means used to visualize the idea. The finished building as product is less important than the ideas evolving through the design process. Designers and architects that work in this field are Archigram, Superstudio, Diller+Scofidio, Jhon Hejduk, Rem Koolhaas, Bernard Tschumi, Petre Eisenman, Daniel Libeskind. Conceptual design is the approach in architecture where architects and designers extend the boundaries of the well-known and dive deeper exploring the subject in a way provoking architecture to reshape. These works often present constructions that suggest utopian aspirations and new choreographies for human behavior in public and private spaces. It is being argued whether architecture presented through conceptual design is “legitimate architecture”. “Thus conceptual architecture as it has been and in many instances still is being practiced today is equated with lack of understanding of general building principles, shoddy construction, and ignorance of (if not antipathy towards) the need of the client.”² The corollary to this belief is that those buildings that are well constructed, closely identified with their material properties, respond to client requirements, and built on time and on budget are rarely interesting as conceptual projects.³ Conceptual projects are not only necessary they are vitally important for the development of architecture. The best way to redefine and innovate built environment is through conceptual approach. It gives you the opportunity to use all means of visual expression, to cross the boundaries of the possible and the logical, to experiment with materials and construction methods. Through conceptual design architecture alters and operates in a different role. It is not a building or representation of its project it is rather defined as art presentation or utopian study which is the beginning of a process to explore beyond the familiar fields of architecture.

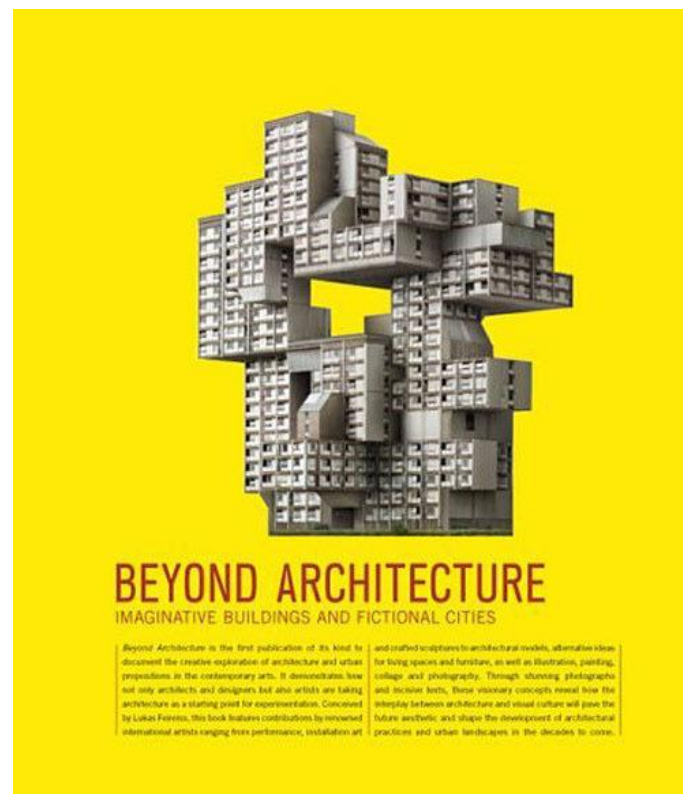


Fig. 5. Beyond Architecture: Imaginative Buildings and Fictional Cities. This is the first publication of its kind to document the creative exploration of architecture and urban propositions in the contemporary arts

1. Louis Kahn quote from Frampton, Kenneth. *Modern Architecture, a critical history*. page 245
2. Nancy Nall, "Architecture was House's Beauty and its Downfall," *Fort Wayne News Sentinel*, August 2, 2002; Mark Lamster, "The Vexner Center," *Metropolis*, July 2001
3. *Conceptual Matter on Thinking and Making Conceptual Architecture* by ERIC LUM, This article appeared in *Harvard Design Magazine*, Fall 2003/Winter 2004, Number 19

Beyond Architecture is a collection of projects representing the work not only of architects and designers but also artists. They are all taking architecture as a starting point for experimentation. The presented ideas vary from performance, installation art and crafted sculptures to architectural models, alternative ideas for living spaces and furniture, as well as illustration, painting, collage and photography. All those stunning visual presentations of visionary concepts reveal the hidden creative potential for architecture and urban environment.

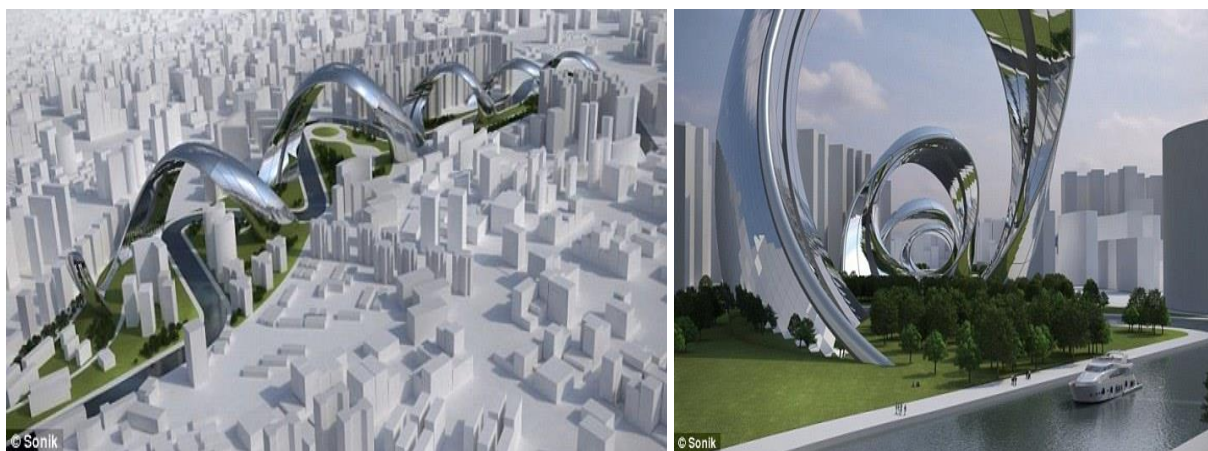


Fig. 6. A conceptual design entry in the Re-Thinking Shanghai 2012 competition

3.2. Cognitive architectural approach

The meaning of the word cognitive is mental process of perception, memory, judgment and reasoning as contrasted with emotional and volitional process. Cognitive approach in architecture can be analyzed as the opposite of conceptual design. If we compare conceptual approach with expressing emotions, cognitive approach is rather clear reasoning and study of the different aspects of the project. With this approach the architect and designer uses strictly defined boundaries within the creative process. There are specific features of a project that should be well studied, analyzed and observed. Such as:

- Client brief and requirements
- Building type and construction techniques
- Budget
- Time
- Location
- Climate
- Landscape, topology, ground conditions, ecology and access
- Context, history and urban fabric
- Accessibility
- Sustainability
- Comfort, durability, flexibility
- Manufacturing and prefabrication

There is a lot wider range of constraints that may be placed in the designing process like tradition, religion, social concerns, art and culture, etc. By choosing this approach we built the basis for creating a project closer to the clients' needs more realistic and easily constructed, may be less expensive and more

functional. A profound study of the matter lacks the creative dash of the conceptual approach because of the set boundaries but on the other hand it gives the architect the confidence of the conscious choice made through the creative process.

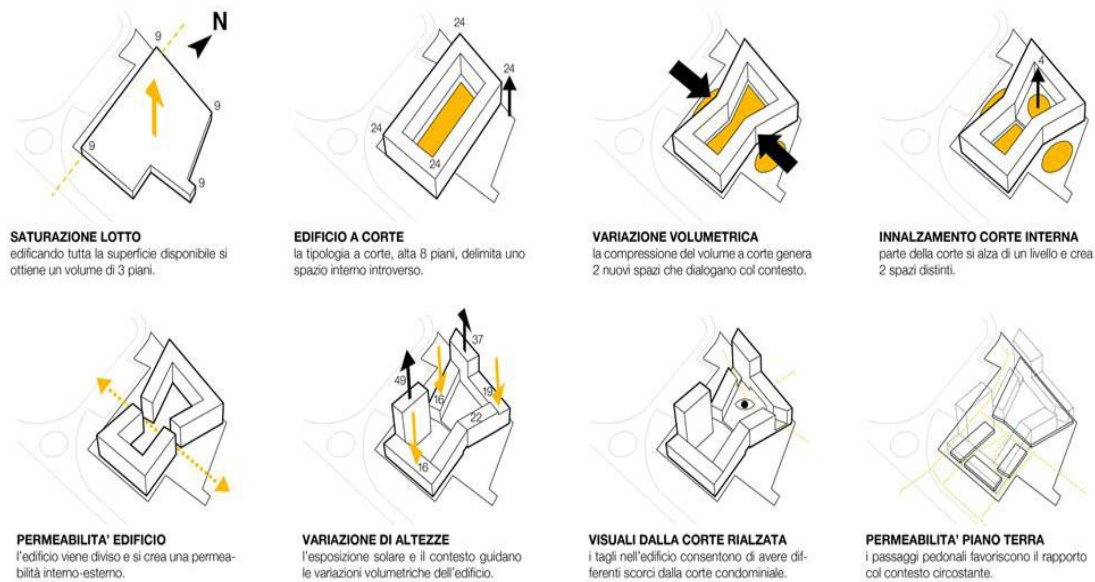


Fig. 6. Courtesy of BIG architects

An interesting example for cognitive approach in problem-solving tasks for urban planning are the projects of BIG - Copenhagen and New York based group of architects, designers, builders and thinkers operating within the fields of architecture, urbanism, research and development. Big part of their project presentations include profound research in different features of the required task, depending on the specifics of the project.

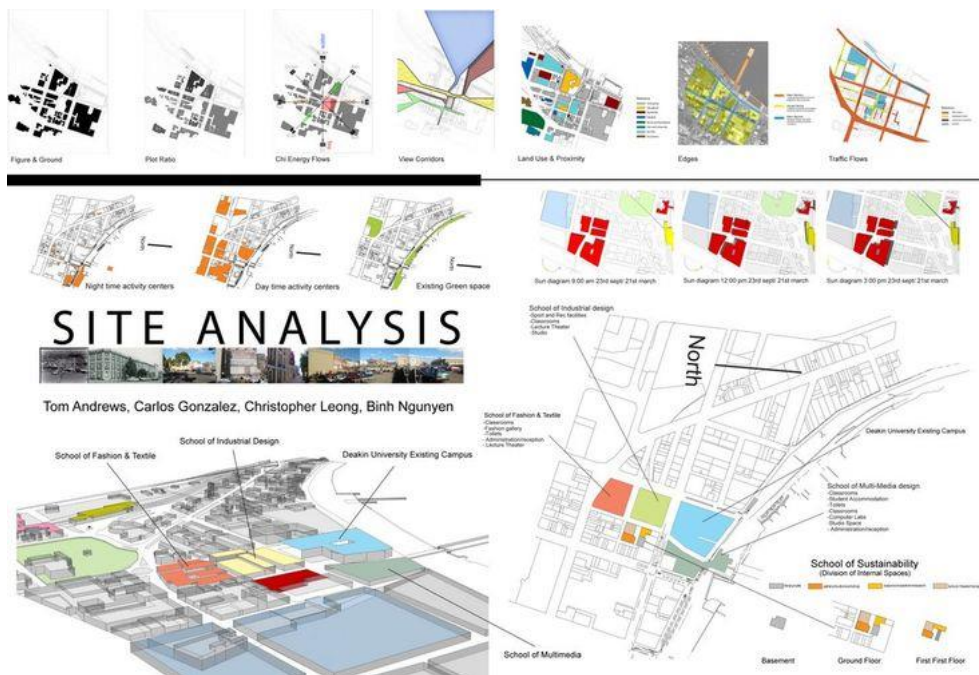


Fig. 7. Example of site analysis and location

3.3. Organic architectural approach

Organic architecture is an alternative approach to solving design problems. It is a tendency which promotes harmony between human habitation and natural world. The term “organic architecture” was first introduced by the great architect Frank Lloyd Wright claiming that nature is the ultimate model for architecture. Organic architecture can be achieved through design approaches so sympathetic and well integrated with a site that buildings, furnishing, and surroundings become part of a unified, interrelated composition. The organic approach is in close relation to nature that is why it can be observed as a seed that is something very small and fragile at the beginning but grows into something huge and stable within decades. The same logic is implied in this approach. The creative process grows from the inside out and as Frank Lloyd Wright says “form and function are one”. Organic approach in architecture is not only a reinterpretation of Nature’s principles to build forms more natural but also method through which architecture connects with nature through form, function, used materials, human behavior in the built environment. The basis of this approach is simplification of the form according to the function through interaction with nature.

“So here I stand before you preaching organic architecture... not cherishing any preconceived form fixing upon us either past, present or future, but instead exalting the simple laws of common sense...”- Frank Lloyd Wright, *An Organic Architecture*, 1939



Fig. 8. Exterior view of Fennel Residence – an organic approach for a summer retreat house



Fig. 9. Interior view of Fennel Residence – an organic approach for a summer retreat house

There are many different architectural approaches in solving an architectural planning task. Here we managed to examine only three of them. Another types of architectural approaches will be studied in further papers and publications. What is important to summerise at the end of this paper is that it is of great significanse an architect or designer to establish his or her approach that feels comfortable with. The right approach for our personality and nature would bring to life valuable ideas and projects. The architectural approach is the design language through which one can clearly recognise the problematic conditions and the decision to find a solution. If one's design vocabulary is limited, then the range of possible solutions to a problem will also be limited. Knowing and understandin the diversity of different architectural approaces gives you the fluency in the design vocabulary and the confidence in achieving the desired result.

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